### Message

From: Flowers, Lynn [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

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**Sent**: 5/20/2016 12:15:31 PM

To: McQueen, Jacqueline [/o=ExchangeLabs/ou=Exchange Administrative Group

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Subject: FW: EU countries again delayed a vote on glyphosate yesterday despite FAO/WHO "unlikely to be carcinogenic"

determination on Monday

Sharing...

Lynn Flowers, PhD, DABT Senior Science Advisor Office of Science Policy US EPA Washington, DC 202-564-6293

From: Flowers, Lynn

**Sent:** Friday, May 20, 2016 8:15 AM

To: Deener, Kathleen < Deener. Kathleen@epa.gov>

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**Subject:** EU countries again delayed a vote on glyphosate yesterday despite FAO/WHO "unlikely to be carcinogenic" determination on Monday

There are a number of articles on this that came out overnight... I just picked one to share...

European Union countries on Thursday again delayed a vote on whether to renew the sales authorization of glyphosate, the active ingredient in Monsanto Co.'s popular weedkiller Roundup, amid conflicting scientific assessments on whether the substance causes cancer in humans.

"Since it was obvious that no qualified majority would have been reached, a vote was not held," said a spokeswoman for the European Commission, the EU's executive arm. The commission had proposed to reauthorize glyphosate for nine years once its current sales license runs out on June 30.

The spokeswoman said the commission would now reflect on how to react to the outcome of two-day discussions among experts from EU countries. After a failure to achieve the necessary majority in favor of a renewal at an earlier meeting in March, the commission had already reduced the proposed authorization period to nine from 15 years.

The French government said earlier this month that it was still opposed to a reauthorization of glyphosate, while Germany said it would abstain from a vote. Italy and several other countries have also come out against a renewal of the sales license in recent months.

"If no decision is taken before June 30, glyphosate will be no longer authorized in the EU and member states will have to withdraw authorizations for all glyphosate-based products," the commission spokeswoman said. That would mean that stores have six months to sell off remaining stocks. After that, users already in possession of glyphosate

would have as much as a year to use up or dispose of their remaining products. National governments have the right to shorten these phaseout periods.

Glyphosate is one of the most-widely used weedkillers in the EU and a key revenue generator for Monsanto.

But the bloc's reauthorization has become contentious after the World Health Organization's International Agency for Research on Cancer said in spring last year that glyphosate "probably" has the potential to cause cancer in humans — a claim disputed by other public-health agencies, including a study produced for the European Food Safety Authority, EFSA.

On Monday, an international expert group under the auspices of the United Nations Food and Agriculture Program and the WHO concluded that "glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet."

Health and safety concerns persist nevertheless. "Safety first, health first. I am against authorizing this product until these doubts have been entirely ruled out," Sigmar Gabriel, Germany's vice chancellor and head of the center-left Social Democratic Party, said Tuesday. The SPD's center-right coalition partners, which control the agriculture ministry, are backing a reauthorization, which forced Germany to abstain in Thursday's vote.

Glyphosate has also come under scrutiny in the U.S. The Environmental Protection Agency, which regulates pesticides, has been reviewing glyphosate as part of a reregistration process that happens every 15 years. The agency for decades has deemed glyphosate safe for people and animals when it is used according to directions on labels.

In early May, the EPA posted new research rebutting the IARC's finding, with the EPA's own Cancer Assessment Review Committee finding "no association" between the herbicide and most cancers and "conflicting evidence" when it comes to non-Hodgkin lymphoma.

Monsanto and agricultural groups quickly trumpeted the EPA's finding, but the U.S. agency within hours took down the report, saying the full cancer review isn't yet complete and that the agency also aims to analyze research of other governments and the U.S. Health and Human Services Department before releasing the full assessment by the end of this year.

That move irked some in the agricultural industry and prompted inquiries from two U.S. congressional committees, concerned over the EPA's handling of the glyphosate review.

Monsanto estimates Europe and Africa to represent the company's second-largest market by sales, generating about 12.2% of the company's \$15 billion in fiscal 2015 revenue. Monsanto doesn't break out glyphosate sales by country, but the weedkiller is one of Europe's most used. It ranked as the top pesticide for arable crops in the U.K., according to the country's environmental department, and applied to 39% of Germany's total arable area, according to research by German academics.

The IARC's finding drew fresh opposition to glyphosate around the world, and produced other ripple effects for Monsanto, among the pesticide's top global sellers. After the IARC classification of glyphosate, California's Office of Environmental Health Hazard Assessment moved to list it as a cancer-causing chemical, which would require labels or signs to alert farmers and consumers. Monsanto in January sued to stop the move, saying it contradicted decades of research backing glyphosate's safety.

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From: Deener, Kathleen

**Sent:** Wednesday, May 18, 2016 4:01 PM

To: Cogliano, Vincent < cogliano.vincent@epa.gov>

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Subject: RE: UN Agencies: Glyphosate 'Unlikely' to Cause Cancer (BNA Report)

Thanks Vince. I hadn't seen that. I'm pasting a related Greenwire story here for anyone who is interested:

# Leaders of panel that backed glyphosate took Monsanto funding

Published: Wednesday, May 18, 2016

The United Nations panel that recently found glyphosate was not likely to be a human carcinogen has since been roiled by conflict-of-interest allegations.

Alan Boobis, the chairman of the United Nations' joint Food and Agriculture Organization/World Health Organization meeting on glyphosate, also serves at the vice president of the International Life Sciences Institute Europe. Its co-chairman was Angelo Moretto, a board member of ILSI's Health and Environmental Sciences Institute.

According to documents posted by the group U.S. Right to Know, the institute accepted a \$500,000 donation from Monsanto Co., which manufactures glyphosate, in 2012. The group also received \$528,500 from CropLife International.

Boobis said his objectivity was not compromised by the funding.

"My role in ILSI (and two of its branches) is as a public-sector member and chair of their boards of trustees, positions which are not remunerated," Boobis said. "The boards of trustees are responsible for oversight of the organizations and their scientific programs."

Environmental groups condemned the finding.

"There is a clear conflict of interest here if the review of the safety of glyphosate is carried out by scientists that directly get money from industry," said Vito Buonsante, a lawyer for the group ClientEarth. "This study cannot in any way be reliably considered when deciding whether to approve glyphosate" (Arthur Neslen, <u>London Guardian</u>, May 17). -- SP

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From: Cogliano, Vincent

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Perovich, Gina <<u>Perovich.Gina@epa.gov</u>>; Jones, Samantha <<u>Jones.Samantha@epa.gov</u>> **Subject:** Re: UN Agencies: Glyphosate 'Unlikely' to Cause Cancer (BNA Report)

Thank you, Kacee. Did you also see the story about Monsanto's large gifts to ILSI, where the reporter noted that a VP of ILSI is Alan Boobis, who chaired EFSA's glyphosate panel?

On May 18, 2016, at 08:51, Deener, Kathleen < Deener, Kathleen @epa.gov> wrote:

# UN Agencies: Glyphosate 'Unlikely' to Cause Cancer

By Bryce Baschuk

May 16 — A pair of United Nations agencies said the widely used herbicide glyphosate and two insecticides—diazinon and malathion—are unlikely to pose carcinogenic risk to human beings when exposed to the body in dietary form.

The UN Food and Agriculture Organization (FAO) and the World Health Organization (WHO) issued their findings May 16 in a joint report following a weeklong meeting in Geneva.

The findings are noteworthy as they run counter to a 2015 report by WHO's International Agency for Research on Cancer (IARC) that classified glyphosate, diazinon and malathion as "probably carcinogenic to humans."

The FAO and WHO conclusions were based upon an analysis of a "large number" of genotoxicity studies conducted during the past five years that measured the chemicals' effects on living mammals—primarily mice and rats, but also humans.

The joint report noted that it evaluated several new studies that were not considered in the 2015 IARC report.

"In view of the absence of carcinogenic potential in rodents at human-relevant doses and the absence of genotoxicity by the oral route in mammals, and considering the epidemiological evidence from occupational exposures, the Meeting concluded that glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet," said the report.

## Glyphosate

Though the joint report noted that there is "some evidence" of a positive association between glyphosate exposure and a risk for non-Hodgkin lymphoma, it said the only study of "high quality" found no evidence of an association at any exposure level.

Glyphosate—originally developed by Monsanto International SARL under the brand name Roundup—is the world's top herbicide by volume and is used in more than 750 products related to agriculture, forestry, urban and residential landscaping.

The report was released just days before the European Commission's committee that handles pesticides was scheduled to weigh in on re-licensing glyphosate in the 28-nation EU.

"We welcome this rigorous assessment of glyphosate by another program of the WHO, which is further evidence that this important herbicide does not cause cancer," said Phil Miller, Monsanto's vice president for global regulatory and government affairs. "IARC's classification was inappropriate and inconsistent with the science on glyphosate. Based on the overwhelming weight of evidence, the [FAO/WHO report] has reaffirmed the findings of regulatory agencies around the world that glyphosate is unlikely to pose a cancer risk."

### Diazinon

The joint report found "no convincing evidence" of a positive association between non-Hodgkin lymphoma and diazinon—which is used in agriculture and in home pest control.

The FAO/WHO report said an isolated study found "weak evidence" of a positive association between leukemia and lung cancer to diazinon exposure.

A 2001 U.S. Agricultural Health Study (AHS) report previously linked diazinon exposure to an increased risk for leukemia.

#### Malathion

The joint report said there is "some very weak evidence" of a positive association between non-Hodgkin lymphoma and malathion—which generally is used in agriculture, for mosquito eradication, and in urban and residential landscaping.

The report noted that the only large cohort study of high quality found no evidence of such an association at any exposure level.

The FAO/WHO report noted that one study found a possible positive association between occupational exposure to malathion and risk of aggressive prostate cancer.

The U.S. Agricultural Health Study previously found an increased risk of lung cancer for humans exposed to malathion.

In a statement, CropLife International CEO Howard Minigh commended the report, which he said "confirms prior conclusions of regulators around the world."

"It is important to note that the International Agency for Research on Cancer is not a regulator, and uses a narrow set of data to assess potential for hazard; whereas, regulators assess the real risk of a product," he wrote.

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